Docket Number: NSC-P05052

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE Patent Application

Thereby certify that this transmittal of the below described documents is being deposited with the United States Postal Service in an envelope bearing Express Mail Postage and an Express Mail label, with the below serial number, addressed to the Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450, on the below date of deposit.						
Express Mail Label No.:	EV375331857US	Name of Person Making the Deposit:	ANTHONY CHOU			
Date of Deposit:	February 9, 2004	Signature of the Person Making the Deposit:	anthony the			

In re Application of:

Chen, Sean S.

Serial No.:

09/970,297

Examiner:

Cunningham,

Filed:

10/02/01

Art Unit:

2816

For:

LOW VOLTAGE, LOW

BAND-GAP REFERENCE

Mail Stop RCE

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL (SUBSECTION(B) OF 35 U.S.C. § 132)

This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 for the above-identified application.

1.	Submission required under a filing under 37 C.F.R. § 1.114					
	a.	[ ] Previously submitted				
	i.	[ ] Consider the amendment(s)/ reply under 37 C.F.R. § 1.116 previously filed on				
	ii.	ii. [ ] Consider the arguments in the Appeal Brief or Reply Brief previously filed on				
	iii.	[ ] Other	_			
	b.	[ X ] Lilolosed	02/12/2004 DTESSEM1 00000 100 00297			
	i.	[X] Amendment/Reply				
	ii.	[ ] Affidavit(s)/Declaration(s)				
	iii.	[ ] Information Disclosure Statement	(IDS) 17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
	iv.	[ ] Other				
2.	Miscel	llaneous				
	a.	[ ] Suspension of action on the above C.F.R. § 1.103(c) for a period of	re-identified application is requested under 37 months.			

b.	Other	
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### Ext nsion of T rm

- 3. The proceedings herein are for a patent application and the provisions of 37 C.F.R. 1.136 apply.
- (a) [ ] Applicant petitions for an extension of time under 37 C.F.R. 1.136 (fees: 37 C.F.R. 1.17(a)-(d) for the total number of months checked below:)

Extension	<u>Fee</u>		
[ ] one month	\$110.00		
[ ] two months	\$420.00		
three months	\$950.00		
[ ] four months	\$1,480.00		

Fee \$

If an additional extension of time is required, please consider this a petition therefor.

(b) [X] Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.

#### FEES DUE

The RCE fee under 37 C.F.R. § 1.17(e) is required by 37 C.F.R. § 1.114 when the RCE is filed.

CLAIMS						
	NO. OF CLAIMS		EXTRA CLAIMS	RATE	FEES	
Basic Application	Basic Application Fee					
Total Claims	18	Minus 20=	0	X \$18 =	\$	
Independent Claims	3	Minus 3=	0	X \$86 =	\$	
If multiple depe	\$					
TOTAL APPLICATION FEE DUE					\$770.00	

#### **PAYMENT OF FEES**

- 1. The full fee due in connection with this communication is provided as follows:
- The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No.: 23-0085.
   A <u>duplicate copy</u> of this authorization is enclosed.

[X]	A check in the amount of \$ 770.00			
[]	A check in the amount of \$			
[X]	Charge any fees required or credit any overpayments associated with this filing to Deposit Account No.: 23-0085.			
followir	Please direct all correspondence concerning the above-identified application to the ng address:			
	WAGNER, MURABITO & HAO LLP Two North Market Street, Third Floor San Jose, California 95113 (408) 938-9060			
	Respectfully submitted,			
Date:_	February 9, 2004  By: Reginald A. Ratliff Reg. No. 48,098			



## United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.

FILING DATE

KST NAMED INVENTOR

ATTORNEY DOCKET NO.

CONFIRMATION NO.

09/970,297

10/02/2001

Sean S. Chen

NSC-P05052

9656

11/07/2003

WAGNER, MURABITO & HAO LLP Third Floor Two North Market Street San Jose, CA 95113

**RECEIVED** 

NOV 1 0 2003

WMH

**EXAMINER** 

CUNNINGHAM, TERRY D

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**DOCKETED** Date: 11-11-03 Initials:

		OIPE				M	
	/	20 Jam 6	Application No.		Applicant(s)		
* •		FEB 0 9 2004 12	09/970,297		CHEN, SEAN S.		
	Office Action Summ	NY STO	Examiner		Art Unit		
		TRADEMARK	Terry D. Cunning	ham	2816		
Period fo	The MAILING DATE of this cor r Reply	ommunication app	ears on th cover	sheet with the c	orrespondence ad	dress	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status							
1)⊠	Responsive to communication	on(s) filed on <u>30 S</u>	September 2003				
2a)⊠	This action is FINAL.	2b)□ Th	is action is non-fi	nal.			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims							
l ' <u> </u>	Claim(s) <u>1-4,6-8,11-13,15-2</u>	1 and 23 is/are pe	ending in the appl	ication.			
·	4a) Of the above claim(s)						
	Claim(s) is/are allowed						
· ·	Claim(s) <u>1-4,6-8,11-13,15-21</u>		ected.			T.	
i	Claim(s) is/are objecte						
·	Claim(s) are subject to		r election require	ment.			
Applicati	on Papers	•					
9)[	The specification is objected t	o by the Examine	er.				
10)🖾	The drawing(s) filed on 20 Oc		,	•	•		
	Applicant may not request that						
11)□	The proposed drawing correct		_ , ,,	• • • • • • • • • • • • • • • • • • • •	ved by the Examin	er.	
	If approved, corrected drawing	•	. •	tion.			
12)☐ The oath or declaration is objected to by the Examiner.							
i	ınder 35 U.S.C. §§ 119 and 1						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
	1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing F nation Disclosure Statement(s) (PTO	•	4) 5) 6)		(PTO-413) Paper No Patent Application (PT		
U.S. Patent and T PTOL-326 (R		Office Ad	ction Summary		Part of	Paper No. 10	

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#### **DETAILED ACTION**

## Summary of changes in this action

1. Since claim 1 has been amended to recite the connection of the "pull-up device", the New Matter rejection is hereby removed, since such is now attempting to refer to element 320. Applicant has now clarified that the recited "voltage pull-up device" is intending to refer to element 320. However, due to the new claim language, the issue is now being addressed as a rejection under the second paragraph of 35 U.S.C. § 112,

### Specification

The amendment to the specification is hereby objected to because the amendment to the paragraph linking pages 13-14 now refer to a "reference circuit". However, it is not clear what the "reference circuit" is referring to.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, there is no support found for the "voltage pull-up device" having the connections recited. As disclosed, the "voltage pull-up device" is part of the "band-gap reference circuit", thus, it is not seen how it can be connected thereto. To overcome this, it is suggested that "circuit" in line 2, be changed to something such as --unit--. Note, similar correction would be required in line 5 and any corresponding occurrences in the dependent claims. This will clarify that the element recited in line 2 is part of the "band-gap reference circuit" of line 1, not the same thing.

Claims 2-4 and 6 are rejected for the reasons discussed above with claim 1.

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In claim 7, line 4, the phrase "low impedance" lacks relativity and is confusing.

Claims 8 and 11-13 are rejected for the reasons discussed above with claim 7.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-8, 11-13, 15-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadanka et al. (USPN 5,621,308) in view of newly cited art to Mietus (USPN 5,666,046). Kadanka et al. disclose, in Fig. 2, a circuit comprising: "a band-gap reference circuit (73)"; "a buffer circuit (54)"; and "a voltage pull-up device (70)", wherein the "voltage pull-up device" has a "transistors (48)". Kadanka et al. does not expressly disclose that transistor 46 has a "less than  $1.0~\rm V_{BE}$ ". However, it is notoriously well known, as expressly taught by Mietus (e.g., see Col. 1, lines 56-67), to use a voltage of 0.7 volts for the expect advantage of using a lower supply voltage (e.g., 0.8 volts). Therefore, it would have been obvious for one skilled in the art to manufacture transistor 48 with "less than  $1.0~\rm V_{BE}$ " for the expected advantage allowing for a lower supply voltage.

Examiner has fully considered Applicant's remarks for the above rejection and has not found them to be persuasive. Applicant remarks that "the advantage of low impedance found in the claimed disposition is a result unexpected by Kadanka and Mietus". However, Applicant provides no reasons to support this accusation. Examiner refutes this statement and contends that since the combination of Kadanka and Mietus providing a regulated output, it will

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necessarily have "low impedance". Further, since the specification and claims fail to provide any specification definition for this phrase, "low impedance" would be given its broadest reasonable interpretation. Clearly, the combination of Kadanka and Mietus metes that broadest reasonable interpretation of "low impedance".

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 703-308-4872. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0956.

TC November 5, 2003 Terry D. Cunningham Primary Examiner Art Unit 2816